

ABSTRACT

According to a preferred embodiment, the present invention features a bulk catalyst that includes precipitated cobalt metal. The precipitated cobalt catalyst further includes a textural promoter, a binder and optionally a Group I metal. The method of making the catalyst is optimized so as to enhance attrition resistance and improve activity. According to some embodiments, the present catalyst is made by a method that includes one or a combination of: calcination under optimized temperature conditions; exposure to an acidic solution; and addition of a binder to a suspension of a precipitate. According to some embodiments, a Fischer-Tropsch process includes contacting the present catalyst with a feed stream containing carbon monoxide and hydrogen so as to produce hydrocarbons.